NATIONAL CANCER INSTITUTE
MMHCC
the Mouse Models of Human Cancers Consortium

MMHCC Newsletter January 2005

We wish all our readers a healthy, happy, and successful year 2005!

MouseLine

The Mouse Transcriptome Project

(http://www.ncbi.nlm.nih.gov/genome/guide/mouse/MouseTranscriptome.html)

The Mouse Transcriptome Project is a trans-NIH initiative that began with two objectives:
(i) to generate a reference data set detailing the spatially-controlled expression profiles for a large subset of genes in the C57BL/6J genome, and
(ii) to make this database freely available to the research community.

This project utilizes Massively Parallel Signature Sequencing (MPSS) technology to profile large mRNA populations. Information about the technology and the methods of sample preparation, data generation, and data analysis are described at the Lynx Web Site (http://sgbpub.lynxgen.com)

The Mouse Transcriptome Project has begun the release of the MPSS data. When finished, it will consist of approximately 90 tissue samples (primarily from adult tissues) from both male and female mice: (http://www.ncbi.nlm.nih.gov/genome/guide/mouse/TranscriptomeSamples.html).

The current data for finished tissues are available in queriable form and mapped to the mouse genome at http://sgbpub.lynxgen.com. The downloadable datasets are available from the NCBI Gene Expression Omnibus (GEO) Web Site (http://www.ncbi.nlm.nih.gov/geo) under GEO accession GPL1010. If you have any questions, please contact Peter Good at goodp@mail.nih.gov.

Request for Information (RFI): NIH Knockout Mouse Inventory Project

http://grants2.nih.gov/grants/guide/notice-files/NOT-OD-05-015.html

Background

An international meeting held in the autumn of 2003 and recently reported in *Nature Genetics* (Austin et al., *Nature Genetics* , September 2004; 36(9): 921-924) recommended initiation of a public resource project to create a null mutation for every protein-coding gene in the mouse genome. While a current estimate is that there may be knockout ES cells for as many as 30% to 50% of mouse genes, to adequately determine the magnitude of the effort that would be required for a mouse knockout initiative, NIH is doing an inventory of how many appropriate ES cell lines and mice have been made that are available to the entire research community under reasonable conditions. This RFI is aimed at soliciting information from the research community to aid in assembling this inventory.

Request for Information (RFI): NIH Knockout Mouse Inventory Project cont.

Information Requested
Investigators who have constructed mouse knockouts and/or mutant ES cell lines are invited to provide the NIH with information about their constructs, and may do so at:
http://www.informatics.jax.org/mgihome//submissions/knockout_inventory.shtml.

Please note the inventory currently includes information supplied by the MGI database as well as gene target information from the sequence entries in dbGSS. Therefore, published mutants may already be included in this inventory. If you have additional information for your mutant(s), please enter it at the web site; redundancy will be eliminated at a later stage. **The deadline for submittals is Feb 1, 2005.**

The information supplied will be used to (i) assemble an inventory of currently existing ES cells and mice containing a null mutation, (ii) identify which mice are already publicly available or could be released to the public, as well as the source (public repository or individual labs) from which they can be obtained, and (iii) facilitate the placement of these cells and mice into repositories for efficient distribution to the research community, thereby reducing the burdens of distribution on the individual investigators who first created the lines. The compilation will help in determining the amount of effort required, as well as avoidance of duplication of previous work, to establish a publicly available repository of ES cells containing null mutations in all of the protein-encoding genes in the mouse genome. A primary reason for this repository is the expectation that it will result in a substantial savings of labor and expense by investigators who must now expend their own resources to generate mutant ES cells and mice. When the inventory has been completed, the results will be made available on http://www.nih.gov/science/models/mouse/ and through Mouse Genome Informatics (MGI).

Responses
Please submit information at:
http://www.informatics.jax.org/mgihome//submissions/knockout_inventory.shtml. If you have any questions, email KOMP@mail.nih.gov.

Selected Meetings

April 5 – 8, 2005
International Society for Cellular Oncology
Belfast, North Ireland
Meeting Information: http://www.qub.ac.uk/isco/
Abstract Deadline: January 21, 2005

April 16 - 20, 2005
96th Annual AACR Meeting
Anaheim, California
Meeting information: http://www.aacr.org

For more meetings and meeting information see
http://emice.nci.nih.gov/emice/communication/calendar/index.html

Funding Opportunities

Centers of Cancer Nanotechnology Excellence
RFA-CA-05-024
National Cancer Institute
http://grants.nih.gov/grants/guide/rfa-files/RFA-CA-05-024.html

Pre-Application meeting: http://grants.nih.gov/grants/guide/notice-files/NOT-CA-05-006.html

Cancer Nanotechnology Platform Partnerships
RFA-CA-05-026
National Cancer Institute
http://grants.nih.gov/grants/guide/rfa-files/RFA-CA-05-026.html

Pre-Application meeting: http://grants.nih.gov/grants/guide/notice-files/NOT-CA-05-006.html

Innovative Technologies for Molecular Analysis of Cancer
RFA-CA-06-002
National Cancer Institute
http://grants.nih.gov/grants/guide/rfa-files/RFA-CA-06-002.html

Innovations in Cancer Sample Preparation
RFA-CA-06-004
National Cancer Institute
http://grants.nih.gov/grants/guide/rfa-files/RFA-CA-06-004.html

Shared Instrumentation Grant Program
PAR-05-028
National Center for Research Resources
http://grants.nih.gov/grants/guide/pa-files/PAR-05-028.html

Repository News - Last Call

The following strains will be maintained as live colonies until the **end of January 2005**. After this date, they will be supplied as cryopreserved embryos. If you foresee using one of these strains in the near future, please order now!

1. 129-*Aprt*$^{<tm1Jat>}$ (Aprt)
   http://mouse.ncifcrf.gov/available_details.asp?ID=01XJ5
2. B6;129S2-*Blm* $^{<tm3Brd>}$ (Bloom homolog null)
   http://mouse.ncifcrf.gov/available_details.asp?ID=01BM1
3. B6;CBA-Tg(BCR-ABL)623Hkp (P190 BCR-ABL)
   http://mouse.ncifcrf.gov/available_details.asp?ID=01XE8
4. 129-*Smad3* $^{<tm1Par>}$ (Smad 3 null)
   http://mouse.ncifcrf.gov/available_details.asp?ID=01XF4
5. 129.Cg-*Mdm2* $^{<tm1.2Mep>}$ (Mdm-2 floxed)
   http://mouse.ncifcrf.gov/available_details.asp?ID=01XH9